

Nicotine and Antidiuretic Hormone

SIR,—In your leading article (10 September, p. 600) regarding the inappropriate secretion of the antidiuretic hormone, it is stated that "it is sometimes possible to inhibit A.D.H. secretion by nicotine or alcohol." While this is certainly true of alcohol, exactly the opposite result obtains with nicotine. For years nicotine, either by inhalation or by injection, has been used as a test for the stimulation of the antidiuretic hormone, rather than the converse.

This effect is especially dramatic when a non-smoker smokes a cigarette or two vigorously, after ingesting a water load of a litre. Under these circumstances, the urine flow drops precipitously and the patient will remain oliguric for several hours thereafter, in spite of his relative overhydration. If the patient is a smoker, and has developed a tolerance to nicotine, these effects will be less dramatic.—I am, etc.,

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Poisoning by Propoxyphene Hydrochloride (Doloxene)

SIR,—No case of overdosage with propoxyphene hydrochloride (Doloxene) has been reported in the British literature. We wish to report a case of deliberate poisoning.

A 15-year-old girl was admitted on 26 October 1965 to the Leicester Royal Infirmary, having taken 30 32-mg. tablets of Doloxene 10 hours prior to admission. On admission the patient was drowsy, and responded to painful stimuli. During the course of initial examination she developed recurrent grand mal convulsions, which commenced with bilateral clonic facial movements, rapidly spreading to involve both upper and lower limbs. The average duration of the attacks was 20–30 seconds, and a total of approximately 20 convulsions occurred before being controlled with 15 ml. of intramuscular paraldehyde. The radial pulse remained impalpable, and the systolic blood pressure did not rise above 70 mm. Hg. The respirations were shallow, irregular, and the rate was 8–10 per minute. Deep reflexes were absent, plantar responses were equivocal, pupils were small, but reacted to light. The patient was admitted to the intensive-therapy ward, where the respirations remained 8–10/minute, and the minute volume was 3.5 litres per minute. Intravenous nalorphine hydrochloride was administered, and the respiratory rate increased to 20 per minute, and the minute volume to 14 litres per minute. The effect of the nalorphine hydrochloride wore off after two hours, but the dose was not repeated, since the patient's clinical condition was satisfactory. She recovered consciousness six hours after admission, but continued to be nauseated and vomited several times during the next 24 hours. Laboratory investigations for barbiturates and salicylates were negative. Serum electrolytes showed normal levels apart from an alkali reserve of 15.5 mEq/l.

The first case¹ of poisoning with this drug was that of a 2-year-old negro child who consumed four 65-mg. (260-mg.) capsules. He developed generalized convulsions and slow respirations, but recovered with treatment. A 15-year-old girl took 1,280 mg. of Doloxene.² She became drowsy, and developed generalized convulsions, had absent deep reflexes, a low blood pressure, and had bigeminy on E.C.G. Treatment

with nalorphine hydrochloride and metaraminol was unsuccessful. Another patient took 842 mg. and developed generalized convulsions, loss of deep reflexes, absent peripheral pulses, low blood pressure, and slow respiration. She recovered after treatment with nalorphine hydrochloride and assisted respiration. She also had a right bundle branch block pattern on E.C.G. but this returned to normal on the following day.³

These cases bear a close similarity to our own. They all had generalized convulsions, hypotension, loss of deep reflexes, shallow, slow respiration, and small or absent pulses. Unfortunately an E.C.G. was not performed in our case, but no arrhythmia was noted clinically. There is no specific antidote to propoxyphene hydrochloride, but nalorphine hydrochloride is recommended in the treatment, and in our case we found that it both increased the respiratory rate and the minute volume, and put the patient into a "safe state."

We wish to thank Dr. C. W. Lawson, under whose care the patient was admitted, for permission to publish this case, and Lilly Laboratories for relevant information.

—We are, etc.,

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Herpes Gestationis and the "Pill"

SIR,—Herpes gestationis is a rare and distressing dermatosis affecting exclusively pregnant and postpartum women. It may be expected to occur about once in 4,000 pregnancies. Its pathogenesis is unknown. Suggestions about its cause have included imbalance of gonadotrophic and sex hormones,¹ Rh-isosensitization,² an abnormal metabolic or endocrine product of pregnancy,³ or a deficiency of pyridoxine.⁴ Further evidence for these hypotheses has not appeared. The following observations may be relevant.

Mrs. A., aged 35 years, has 10 children alive and well. In all her pregnancies, except the first, she had severe attacks of herpes gestationis with large bullae on the greater part of her body surface. In each attack the outbreak has been most severe and extensive postpartum, while the degree of antepartum involvement has varied. Her last baby was born in March 1966, and the attack of herpes gestationis lasted until early May. She has had no other skin abnormality. Between pregnancies her skin is normal. Her blood group is Rh-positive. She was Case 3 reported by Mitchell and Jessop.⁵

Following her last pregnancy she was referred to the marriage guidance clinic of the Rotunda Hospital, and Volidan (megestrol acetate, ethinyl-oestradiol B.P.) was prescribed. During May-June she took the tablets without incident. She resumed the tablets in due course at the end of June, and on 7 July she noticed an outbreak of blisters on her arms and legs. This was indistinguishable from previous attacks of herpes gestationis. Five days later (12 July) she stopped the pills, and on 20 July she attended the skin clinic. She was found to have bullae up to 2 cm. diameter on the arms and legs. Betametha-

sone 1.5 mg. daily was prescribed. One week later (27 July) she was seen again and all lesions were subsiding and no new bullae had appeared. The steroid was gradually withdrawn, and by 17 August the skin was normal, faint residual stains only being seen.

Mrs. A. agreed reluctantly to take Volidan again in August-September, and to report if any skin lesions appeared. Volidan was resumed on 28 August and continued daily. Thirteen days later, on 10 September, she noticed blisters on the left forearm. She stopped the tablets at once, but for a few days the blisters increased in number, appearing on the right forearm and on both thighs. On 14 September she attended the skin clinic. Discrete scratched lesions were seen on the forearms and thighs, but no intact bullae were found.

It is suggested that the administration of Volidan reproduced the conditions determining an attack of herpes gestationis. No similar report has been found. It is hoped that other women who have had herpes gestationis may be observed while taking contraceptive pills. If the association can be established it may be a further step towards the solution of this aetiological problem.—I am, etc.,

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Hospital Services and the Aged

SIR,—We have been conscious for some time that unnecessary suffering, morbidity, and even mortality occur among the elderly as a result of the division between geriatric, psychiatric, and local authority responsibilities. This problem becomes even more acute when there is an overall shortage of hospital beds, staff, and welfare accommodation. Non-urgent problems of treatment and disposal can usually be sorted out on a domiciliary or outpatient basis, but when medical, social, and psychiatric factors become acute there is often difficulty in obtaining speedy admission to appropriate accommodation and providing early treatment and relief.

Like Dr. D. W. K. Kay and others (22 October, p. 967), therefore, we felt a need for comprehensive specialized short-term accommodation for the assessment and treatment of patients in whom multiple factors—medical, psychiatric, and social—were operative. Following discussions among those of us concerned, Dr. Duncan Macmillan made available 20 beds at St. Francis Hospital, as a result of which we were able to set up an assessment unit in Nottingham earlier this year. We call this "the assessment and early treatment unit," and in the first few months of its operation we have been delighted with its value and the results achieved.

The unit is run jointly by the geriatric physician, the psychiatrist, and the chief welfare officer for the city of Nottingham, all of whom have equal access to the beds. Only these three or their representative can admit patients. The psychiatric and nursing staff are provided by St. Francis and Mapperley Hospitals; the medi-